

F-16, Selfridge Air National Guard Base.



127th Air Wing (John S. Swanson)

Airpower and the Reserve Components

By PHILLIP S. MEILINGER

Technically, the Air National Guard (ANG) and the Air Force Reserve (AFR) were born soon after the Air Force itself with the passage of the National Security Act of 1947. In truth, the roots of both Air Reserve components (ARCs) go back nearly to the Wright Brothers. Both organizations have matured over time. Today, ANG consists of 106,600 personnel with 1,350 aircraft while AFR has 75,600 personnel and 400 aircraft. All ARC units and personnel must meet active component standards. This simple but immutable requirement means

both the Guard and Reserve are combat-ready and available to deploy worldwide within 72 hours. It is no coincidence that Guard and Reserve crews have so often flown away with top honors at annual Gunsmoke, William Tell, and Bomb and Navigation competitions. Despite past achievements and the essential place of ARCs in today's military, there are major challenges ahead.

Regulars and Reservists

Air Guard and Reserve personnel served in the Army Air Service during World War I, but it was World War II that provided their first major test. It was obvious that the United States had too few Regulars to carry the load, so

Colonel Phillip S. Meilinger, USAF (Ret.), is a senior analyst in the Northrop Grumman Analysis Center and served as dean of the Air Force School of Advanced Airpower Studies.

Report Documentation Page			Form Approved OMB No. 0704-0188	
<p>Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p>				
1. REPORT DATE 2004	2. REPORT TYPE N/A	3. DATES COVERED -		
4. TITLE AND SUBTITLE Airpower and the Reserve Components			5a. CONTRACT NUMBER	
			5b. GRANT NUMBER	
			5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)			5d. PROJECT NUMBER	
			5e. TASK NUMBER	
			5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Center for Counterproliferation Research National Defense University Washington, DC 20319-5066			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)	
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited				
13. SUPPLEMENTARY NOTES The original document contains color images.				
14. ABSTRACT				
15. SUBJECT TERMS				
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UU	18. NUMBER OF PAGES 6
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified		

the war was fought largely by volunteers and draftees—citizen soldiers, sailors, and airmen. When the war ended and the United States demobilized, there was a scramble for funds between the services. For its part, the Air Force preferred to invest in Regulars. The Air Guard and Reserve were pushed aside, saddled with outdated equipment, and not taken seriously: common derogatory terms were “flyable storage” and “military aero clubs.” When the Korean War broke out and ARC units were activated, they performed poorly, living down to the reputation pinned on them.

In the wake of that conflict things improved for ARCs, but when the next major test came in Vietnam, those gains were thwarted when the President decided to fight the war with draftees and Regulars. Except for token call-ups, ARCs were not activated, which had a doubly bad effect. Not only were the two Air Reserve forces not used despite the money and time invested in training for just such a contingency; but they acquired a reputation as draft havens for escaping combat service. Respect for these units by the Regulars sank to new lows.

Fortunately, the problem was recognized and solutions were implemented after the war. First, the end of the draft in 1973 meant that in all future conflicts the ARCs would be the major source of reinforcements. Second, new equipment flooded into ARCs. The post-Vietnam drawdown sent hundreds of relatively new yet combat-proven aircraft from the Regular component into the Guard and Reserve. During this period AFR gained its first fighters—F-105s as well as

the end of the draft in 1973 meant that in all future conflicts ARCs would be the major source of reinforcements

AC-130 gunships, rescue helicopters, and KC-135s. ANG, which had long flown various fighter models, now acquired newer F-4s, A-7s, A-10s, and C-130Es. At the same time, and more importantly, the Air Force hierarchy,

Air expeditionary force arriving in Iraq.



3d Communications Squadron (Adrian Cadiz)

prodded by Congress, worked in concert with ARC leaders to instill a long overdue cultural change.

Although the Total Force concept—the belief that the Regular,

Guard, and Reserve components were symbiotic and essential partners in achieving the Air Force mission—was articulated as early as 1968, it gained traction only slowly. There were encouraging signs to be sure: the first associate program was established in 1968 with AFR. In this scheme, a wing of aircraft was owned by the Regular component, but they were flown and maintained by separate Regular and Reserve squadrons. The program expanded dramatically

and by the end of the Vietnam War included 4 C-5 squadrons and 13 C-141 units. The Total Force concept was becoming a policy.

The military buildup during the 1980s also benefitted ARCs, so both components were in excellent shape when Saddam Hussein moved into Kuwait in August 1990. During the Desert Shield buildup and the Desert Storm combat that followed, ANG and AFR were mobilized and played crucial roles. Over 12,000 Guardsmen entered Federal service, half deployed to Southwest Asia. The Reserve contributed a further 20,000, nearly 8,000 of whom were medical specialists. Virtually every aspect of air combat was reliant on ARCs, including fighters, bombers,

Table 1. Average Age of USAF Aircraft by Component

Aircraft type	Regular	ANG	AFR
A-10	20.8	21.8	22.0
F-15	16.4	24.3	N/A
F-16	11.6	15.2	14.7
C-130	30.0	20.4	21.5
C-141	35.7	36.1	35.9
C-5	20.8	31.4	31.3
KC-135	40.7	42.3	41.7

Source: *Air Force Magazine*, May 2003.

tankers, airlift, reconnaissance, maintenance, medicine, aerial port, and intelligence. Victory in Desert Storm would have been impossible without the Guard and Reserve, and air commander General Charles Horner paid the ultimate compliment when he stated flatly that he could tell no difference between a Regular, Reservist, or Guardsman.

The Air Force drew down dramatically after Desert Storm, cutting both force structure and personnel. Units were deactivated, causing local turmoil. When a Regular unit is deactivated, the personnel and equipment simply pack up and move on or are assigned to another unit. But the Guard and Reserve are locally recruited and have strong local ties; when a unit is deactivated or its aircraft retired, there are often few options for the thousands of people involved. There was, however, a small silver lining to this cloud. As after Vietnam, when Regular units deactivated, their front-line F-15s, F-16s, C-5s, and B-1s were handed down to the ARCs to replace older models.

The decade following Desert Storm saw the ARCs become leaner but also more diversified and effective. AFR activated its first space operations squadron in 1993, with ANG following in 1995. Associate units in fighters, bombers, tankers, and airlifters continued to emerge, and in 2001 ANG adapted a similar structure when it teamed with Regulars to form a blended joint surveillance and target attack radar system wing at Robins Air Force Base.

The ARCs responded to the 9/11 strikes by rejuvenating an air defense system that had been allowed to atrophy. Once there were over 2,600 aircraft dedicated to air defense of the United States, but they dwindled to a few dozen by the late 1990s. After 9/11, the ARCs flew most interceptor and patrol missions over the United States.

Reservists bristle at the insinuation that they are “personnel based” rather than “unit based”

First Air Force, previously commanded by Regulars, received an ANG commander in 1997 and now has primary responsibility for the air defense of the country. At the same time, Guard and Reserve special units such as airborne warning and control system and EC-130 elements began operating at a heavier tempo. When combat began in Afghanistan and then Iraq, the ARCs played a key role. The contribution of both the Air Guard and Reserve in Noble Eagle over the United States, Enduring Freedom in Afghanistan, and Iraqi Freedom was thus substantial, as was the total effort shouldered by the ARCs, specifically the percentages of aircrew by component.

The Air Expeditionary Force

ANG and AFR accomplish certain missions and contribute a range of crucial capabilities at low cost. Yet the ARCs have garnered on average only 10 percent of the Air Force budget over the past decade. Although this cost-effectiveness is typically gained at the expense of long-term commitment in a

deployed status, such statistics make it clear why the Total Force policy has been such a resounding success.

However, challenges face the ARCs. The first, which confronts the entire Air Force, is operations tempo. The end of the Cold War meant profound changes for the Armed Forces. It is often noted that the military has evolved from a stable, predictable, near-garrison force to a volatile, unpredictable, expeditionary force. Its commitments have grown fourfold since the Cold War, while the Air Force has shrunk by 40 percent, making for a greatly increased operations tempo throughout the Total Force.

One response to this increase has been a new organizational structure, the air expeditionary force (AEF). Essentially, 10 AEFs were established, each eligible to deploy for contingencies worldwide during a 90-day window. At the end of its alert cycle, an AEF is replaced by another, returns home, and reverts to normal operations, training, and exercise status for the next year. It would thus ordinarily deploy for 90 days every 15 months. This schedule allows predictability not previously possible while spreading deployments throughout the Air Force. It also enhances flexibility by deploying units for a variety of contingencies in a variety of locations.

A strength of AEF is that it reinforces the Air Force commitment to the Total Force. Previously, Guard and Reserve units were often used as fillers to replace Regular units that deployed overseas. This was particularly true in AFR, although Reservists bristle at the insinuation that they are “personnel based” rather than “unit based.” AFR units deploy to support U.S. contingencies—as do Reservists. Nonetheless, AEF presents special challenges to the ARCs. Overall, 7,000 Guardsmen and 2,000 Reservists were mobilized for Iraqi Freedom, while at the same time Noble Eagle continues; and these two organizations handle more than 75 percent of the flying missions for Noble Eagle. This commitment is expected to continue.

Soldiers boarding Air National Guard C-130.



3rd Communications Squadron (Keith Brown)

The lower operations tempo of the Cold War, long seen as ideal for the Guard and Reserve, has become problematic due to frequent and sustained deployments. Instead of being held in reserve for a major war, ANG and AFR have become part of the spear tip in a series of contingencies. In Iraqi Freedom, the ARCs constituted the bulk of the airlift and tanker fleets, while also contributing significantly in virtually all other areas. This level of effort can cause difficulties with employers, especially if the return time for deployments is not guaranteed.

Operations tempo would seem to be a particularly sensitive issue to Guardsmen and Reservists; after all, most were once Regulars but supposedly switched to ARC to avoid the toll the high deployment pace was taking on their families. According to that argument, the Total Force policy has been a double-edge sword: the ARCs welcome the heightened respect and

attention but has inherited an increased operations tempo that may create morale problems.

Officials from both components reject this argument. Instead they welcome the opportunity to be a part of the Total Force in fact as well as in name, sharing in virtually all the missions and weapons systems of the Regular component. They have no desire to return to the sedentary garrison lifestyle of the Cold War or be seen as a "Federal jobs program." According to these officials, the rank and file feel similarly; they wish to be an integral part of the global Air Force mission. Statistics bear this out. Both ANG and AFR attempt to meet requirements through a voluntary system, "ask rather than task." That has been possible 95 percent of the time. Even during the pressure of the past 2 years with near-simultaneous contingencies, volunteers were still plentiful enough to

handle 75 percent of taskings. In addition, an innovative process of "rainbowing"—combining personnel or equipment from several organizations to meet a deployment requirement—has proven effective. Perhaps of greater significance, ARC recruitment and retention goals have not been a serious problem over the past decade. AFR, for example, has met 96 percent of its recruiting goals, and its retention rate for both officers and enlisted personnel has averaged 90 percent during that period. ANG has done even better. Conventional wisdom would say that the surge in operations tempo since 9/11 would have caused thousands of Guardsmen and Reservists to vote with their feet. Thus far that has not happened, although officials from both components caution that stop-loss actions may have distorted the data over the past two years. Nonetheless, they remain guardedly optimistic that recruitment and retention goals will continue to be met.

**Preparing F-15
for takeoff.**



125th Fighter Wing (Shelley Gill)



U.S. Air Force (Thomas Meneghini)

Staying Equipped

A more worrisome issue is modernization as aircraft age and become more costly to maintain. At the same time, the Air Force is committed to transformation—fielding revolutionary weapons to meet new demands. The F/A-22, F-35, Global Hawk, and uninhabited combat air vehicles are the future, but they are expensive. It will be difficult to balance the needs of modernization—keeping the current inventory in combat condition while transforming into new technologies. For the ARCs, this pinch is acute.

On average ARC aircraft are older than their Regular counterparts. Modernization costs will fall more heavily on the ARCS simply because old aircraft are more expensive to maintain and will wear out first. Especially vexing, when ARC aircraft are retired there are few options for replacing them. Unlike the drawdowns in the wake of Vietnam and Desert Storm, when large numbers of aircraft flowed from the Regulars to the ARCs, there is no such movement contemplated in the future. Even when the F/A-22 and F-35 begin to come on line in the decade ahead, the aircraft they replace—F-15s and F-16s—will be nearing the end of their useful lives. There will be little incentive to put them in the ARCs.

More immediately, there are rumblings that the venerable A-10 is reaching the end of its service life. The

Guard currently operates six squadrons, and three are flown by the Reserve. What will happen to the highly trained personnel of these nine fighter squadrons when their planes head for the bone yard? Ideally, such units will transition into new aircraft—although, as noted, such possibilities are limited. Another solution is to form additional associate and blended units at Regular component air bases near ARC locations scheduled for retirement, or to merge with units across state lines to provide a regional capability. If transitioning into new or different aircraft proves impossible, perhaps flying units can be converted into space operations, intelligence, or maintenance units. Other options include an increased ARC presence in training and education programs. Most flying training units on the major command level have an ARC input, and Reservists are now beginning to assume

Table 2. Air Component Tasking, Noble Eagle (percent of total sorties)

Aircraft type	Regular	ANG	AFR
Fighter	26	71	3
Tanker	21	60	19
Airlift	36	58	6

Table 3. Air Component Tasking, Enduring Freedom (percent of total sorties)

Aircraft type	Regular	ANG	AFR
Fighter	63	33	4
Tanker	71	19	10
Airlift	86	10	4

Table 4. Air Component Tasking, Iraqi Freedom (percent of total sorties)

Aircraft type	Regular	ANG	AFR
Fighter	92	5	3
Tanker	12	77	11
Airlift	39	55	6

Table 5. Air Component Tasking, Air Expeditionary Force (percent of total sorties)

Aircraft type	Regular	ANG	AFR
Fighter	22	72	6
Tanker	75	2	23
Airlift	21	52	27

Table 6. Aircrew Percentage Mix

Aircraft type	Regular	ANG	AFR	Associate
Fighters	62	33	5	
Bombers	92	0	8	
Tankers	46	30	13	11
Strat Airlift	44	6	35	15
Tac Airlift	32	46	22	
Rescue	52	20	28	

wider responsibilities in undergraduate pilot training units.

Regardless, this is a thorny issue with political overtones. The ARCs have formidable support in Congress, and modernization, transformation, and basing problems must be solved to the satisfaction of elected officials on all levels.

There has always been tension between the Air Force components, which have differing goals, demands, and even loyalties based on the state and local focus of Guard and Reserve units. This does not mean they are condemned to misunderstandings, misconceptions, and animosity. A large majority of Guardsmen and Reservists

were once Regulars, so they understand that life. The reverse is not always true. The average Regular is often mystified by Reserve organization and procedures. For example, the dual status of air "technicians," who exist in both components, means they are military personnel subject to military discipline and procedures but are also civilian employees subject to Civil Service Administration regulation. Similarly, the various and not transparent guidelines regarding Reserve "mandays," and the differing pay and entitlement packages based on the number

the average Regular is often mystified by Reserve organization and procedures

of days of active duty, are a source of confusion. In addition, the question of volunteer versus nonvolunteer status can lead to misunderstanding. Under the law, the rights and entitlements of Guard and Reserve personnel are the same whether they have volunteered or been mobilized. Yet there are psychological issues involved with employers and families. Finally, minor administrative, fiscal, and managerial glitches have also arisen over the past two years. Most have been quickly rectified, but to an airman going off to war, any glitch is one too many.

The close working relationships developed within the ARCs over the past decade have been crucial in removing problems. That does not mean the Air Force can rest on its laurels. As each new generation comes aboard in both the Regular and Reserve components, it must continue the educational function. Airpower and spacepower increasingly depend on a seamless Total Force, so all airmen must understand the vital ARC role. It cannot be overstated that the mission of the Air Force depends utterly on the Guard and Reserve, and that will continue in the decades ahead.

JFQ